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[Continued on next page]

- (54) **Title:** IMPLEMENTING A 3G PACKET CORE IN A CLOUD COMPUTER WITH OPENFLOW DATA AND CONTROL PLANES

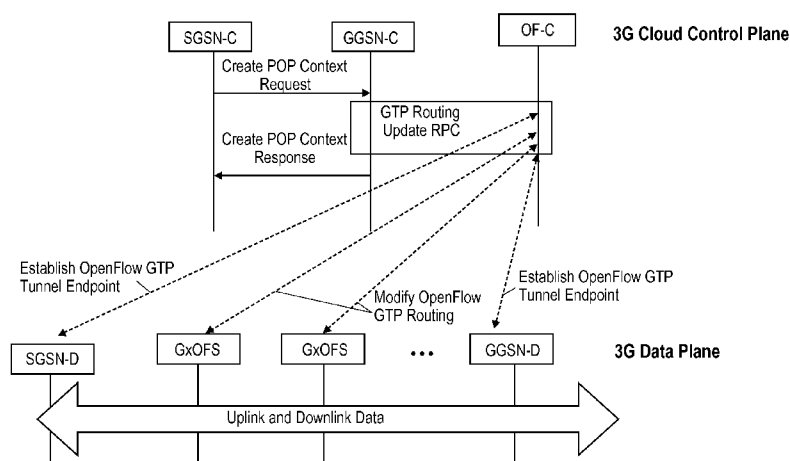


FIG. 19

(57) **Abstract:** A method for implementing a general packet radio service (GPRS) tunnel protocol (GTP) in a packet core (PC) of a third generation (3G) network having a split architecture where a control plane of the PC of the 3G network is in a cloud computing system, the cloud computing system including a controller, the controller to execute a plurality of control plane modules, the control plane to communicate with the data plane of the PC through a control plane protocol, the data plane implemented in a plurality of network elements of the 3G network by configuring switches implementing a data plane of the SGSN and GGSN and intermediate switches to establish a first and second GTP tunnel endpoint.



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